
Bentley Mulsanne: the Beating Heart

08 April 2010 | Classic Driver



In the run-up to the appearance of Bentley's remarkable new flagship, we have been treated to appetisers in the form of small videos, each looking at one aspect of the first, pre-production prototypes. First, it was the body assembly, then the paint shop, and now the beating heart of the Mulsanne, the 6¾-litre, twin-turbocharged V8.

Each 505bhp V8 unit is, of course, hand-assembled. The video demonstrates the delicious care with which each component is placed, balanced, checked - more reminiscent of Swiss watchmaking than the whirl and clatter of a modern automotive assembly line.

While the V8 configuration and 6¾-litre displacement are familiar and favoured at **Crewe**, the **Mulsanne** enjoys the very latest technologies, including two new control systems: cam phasing and variable displacement. This delivers not only the greatest possible refinement, but a 15 per cent improvement in emissions and fuel consumption – by, for example, closing the valves of four of the eight cylinders when cruising.

More than 300 of the engine's components are either new or significantly re-engineered. The Bentley 'wave of torque' – all 752lb ft of it – is now delivered even earlier, at just 1750rpm. Together with the new eight-speed automatic transmission, promising virtually imperceptible gearshifts, the engine ensures that a 'mere tap of the throttle pedal' is enough to deliver 0-62mph in a swift 5.3 seconds.

Says **Phil Cooper**, Bentley's senior production manager in the engine build workshop, "Our new V8 takes nearly 30 hours to build and we never release an engine to our colleagues in the main build hall until we are, literally, prepared to put our name to it." Despite the cutting-edge technologies and hundreds of new parts, a signed engine-maker's plate still adorns every Crewe-built V8.

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